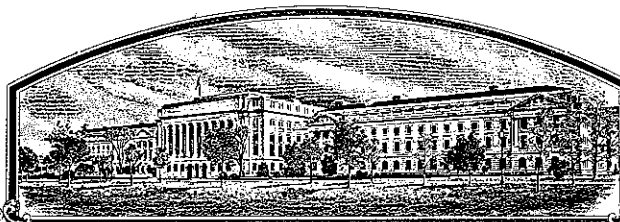


No.

9500077



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*Nobartis Seeds, Inc.*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERE TO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF EIGHTEEN YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

ALFALFA

'Rushmore'



Attest:

*Ann Marie Thra*

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-eighth day of May in the year of our Lord one thousand one hundred and ninety-nine.

*Don Dickinson*

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

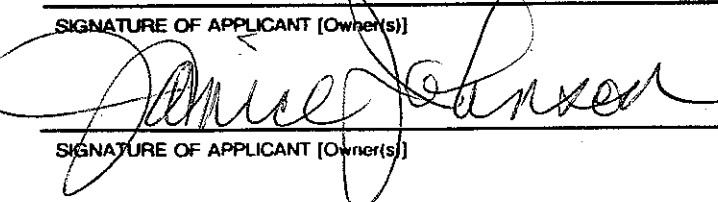
(INSTRUCTIONS ON REVERSE)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) <del>Northrup King Co.</del> <b>Novartis Seeds, Inc.</b> <i>AAA 22 Dec 1998</i>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. 4J16	3. VARIETY NAME Rushmore
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) 7500 Olson Memorial Hwy Golden Valley, MN 55427		5. PHONE (include area code) (612) 593-7333	FOR OFFICIAL USE ONLY PVPO NUMBER 9500077
6. GENUS AND SPECIES NAME Medicago sativa		7. FAMILY NAME (Botanical) Leguminosae	
8. CROP KIND NAME (Common Name) Alfalfa		9. DATE OF DETERMINATION August, 1993	FILING Date <i>Jan. 20, 1995</i> Time <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation		FEE Filing and Examination Fee: \$ <i>2,325.00</i> Date <i>Jan. 20, 1995</i>	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware		12. DATE OF INCORPORATION 1976	CERTIFICATE Certificate Fee: \$ <i>300.00</i> Date <i>2/12/98</i>
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS <b>JIM BECK</b> <del>Jan Johnson</del> ; Alfalfa Product Manager <i>← AAA 14 Jun 1999</i> <del>Northrup King Co.</del> <b>Novartis Seeds, Inc.</b> <i>(per letter)</i> P.O. Box 959 Mpls, MN 55440 PHONE (include area code): (612) 593-7261			
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D, Additional Description of Variety e. <input checked="" type="checkbox"/> Exhibit E, Statement of the Basis of Applicant's Ownership f. <input checked="" type="checkbox"/> Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office <u>January 17, 1995</u> g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,325) made payable to "Treasurer of the United States"			
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "YES," answer items 16 and 17 below) <input checked="" type="checkbox"/> NO (If "NO," skip to item 18 below)			
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? <input type="checkbox"/> YES (If "YES," through <input type="checkbox"/> Plant Variety Protection Act <input type="checkbox"/> Patent Act. Give date: _____) <input checked="" type="checkbox"/> NO			
19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES (If "YES," GIVE NAMES OF COUNTRIES AND DATES) <u>USA - February 25, 1994</u> <input type="checkbox"/> NO			
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.			

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT [Owner(s)] 	CAPACITY OR TITLE Product Manager	DATE January 3, 1995
SIGNATURE OF APPLICANT [Owner(s)]	CAPACITY OR TITLE	DATE

### Exhibit A. Origin and Breeding History of the Variety.

**Rushmore** is a synthetic variety with 214 parent plants. Parent plants were selected for forage yield, persistence, fall dormancy reaction, and forage quality from one or two year old Wisconsin nurseries. Parents trace to breeding populations selected for multifoliolate expression and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot, Aphanomyces root rot (race 1), Leptosphaerulina leafspot, pea aphid, and spotted alfalfa aphid. Recurrent phenotypic selection was used. The following sources were used in the development of Rushmore (% contribution): Blazer XL (30%), Prism (20%), DK 133 (20%), Encore (15%), GH 777 (10%) and Pacesetter (5%). Breeder seed was harvested (Syn 1) was produced near Caldwell, Idaho in 1991. Seed was harvested in total on all parents and bulked to form the breeder seed. Syn 2 generation seed of **Rushmore** was produced in 1992; characteristics observed in this generation did not differ significantly from those observed in the Syn 1 generation.

↑ Sic 8'1  
in orig  
MS.  
AKK  
22 Dec  
1998

**Pacesetter** is a synthetic variety with 86 parents selected for multifoliolate expression, winter-hardiness in a 3-year-old Wisconsin nursery, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot, Leptosphaerulina leafspot, and spotted alfalfa aphid. The following germplasm sources were used in the development of Pacesetter. DK 122 (30%), Crown II (20%), Multi-plier (20%), 2833 (10%), G2841 (10%), Olds 98 (10%). Breeder seed (Syn 1) was produced in cage isolation in 1988. Pacesetter received favorable review from the National Alfalfa Variety Review Board in 1991 and its attributes are documented in its April 1992 record (copy attached).

**Exhibit B. Novelty Statement.**

**Rushmore** is novel due to its combination of characteristics and distinctness from the most similar alfalfa variety. The variety most similar to **Rushmore** is '330'. **Rushmore** is distinct from '330' in the following characters:

1. Spotted alfalfa aphid resistance-- Rushmore is highly resistant (HR) whereas, <sup>330 AAA</sup>'330' is resistant (R).   
 17 Dec 1996  
per FAX

**Spotted alfalfa aphid resistance test** (Forage Genetics, 1992):

<u>Variety</u>	<u>Unadjusted % Resistance</u>	<u>Adjusted %R</u>	<u>NAVRB class</u>
<b>Rushmore</b>	69	65	<b>HR</b>
330	42	40	R
Baker	53	50	R
Ranger	4	4	S
Test mean	56.9		
L.S.D. (0.05)	16.2		
C.V. (%)	19.8		

2. Aphanomyces root rot resistance (race 1)-- Rushmore is highly resistant (HR) whereas, <sup>330 AAA</sup>'330' is resistant (R).   
 17 Dec 1996  
per FAX

**Aphanomyces root rot resistance (race 1) test** (Forage Genetics, 1992):

<u>Variety</u>	<u>Unadjusted % Resistance</u>	<u>Adjusted %R</u>	<u>NAVRB class</u>
<b>Rushmore</b>	47	54	<b>HR</b>
330	39	46	R
WAPH-1	43	50	R
Agate	2	2	S
Test mean	38.9		
L.S.D. (0.05)	10.3		
C.V. (%)	27.6		

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Nov. 18, 1992 Nampa, ID Forage Genetics test for Spotted Alfalfa Aphid Resistance.

	Unadjusted %R	Adjusted %R	NAVRB Class
Rushmore	67.0	60.9	HR
330	39.5	35.9	R
Cuf-101	66.0	60.0	HR
Ranger	3.5	3.2	HR
Test Mean	51.1		
LSD (0.05)	15.4		
C.V.	19.2		

U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 LIVESTOCK AND SEED DIVISION  
 PLANT VARIETY PROTECTION OFFICE  
 BELTSVILLE, MARYLAND 20705

EXHIBIT C  
 (Alfalfa)

OBJECTIVE DESCRIPTION OF VARIETY  
 ALFALFA (*Medicago sativa* sensu Gunn et al.)

NAME OF APPLICANT(S) Northrup King Co.	TEMPORARY DESIGNATION 4J16	VARIETY NAME Rushmore
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) 7500 Olson Memorial Hwy Golden Valley, MN 55427		FOR OFFICIAL USE ONLY PVPO NUMBER 9500077

PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place numbers in the boxes to designate the expressions which are characteristic of the commercial generations of the application variety. Data for quantitative plant characters should be based on a minimum of 100 plants. Include leading zeros when necessary (e.g., 0 8 9) for quantitative data. Comparative data should be determined from varieties entered in the same trial. Plant color may be precisely designated by using any recognized color chart, e.g., The Munsell Plant Tissue Color Charts.

## 1. WINTERHARDINESS:

6

CLASS:

- 1 = Very Non-Winterhardy (CUF 101)  
 3 = Intermediately Non-Winterhardy (Mesilla)  
 5 = (Du Puits)  
 7 = (Ranger)  
 9 = Extremely Winterhardy (Norseman)

- 2 = Non-Winterhardy (Moapa 69)  
 4 = Semi-Winterhardy (Lahontan)  
 6 = Moderately Winterhardy (Saranac)  
 8 = Winterhardy (Vernal)

TEST LOCATION: West Salem, Wisconsin

## 2. FALL DORMANCY:

## FALL DORMANCY (DETERMINED FROM SPACED PLANTINGS)

TESTING INSTITUTION AND LOCATION	DATE OF LAST CUT	DATE REGROWTH SCORED	REGROWTH SCORE OR AVERAGE HEIGHT				LSD .05
			APPLICATION VARIETY	CHECK VARIETIES*			
				Vernal	Ranger	Saranac	
Forage Genetics West Salem, WI	9/1/92	10/5/92	8.00	5.20	7.40	8.50	0.59

\* CUF 101, Moapa 69, Mesilla, Lahontan, Du Puits, Saranac, Ranger, Vernal, or Norseman as appropriate.

Specify scoring system used: inches of regrowth

5

Fall Growth Habit (Determined from Fall Dormancy Trials)

- 1 = Erect (CUF 101)  
 7 = Semidecumbent (Vernal)

- 3 = Semierect (Mesilla)  
 9 = Decumbent (Norseman)

5 = Intermediate (Saranac)

## 3. RECOVERY AFTER FIRST SPRING CUT (In Southwest, first cut after March 21):

2

- 1 = Very Fast (CUF 101)  
 9 = Very Slow (Norseman)

3 = Fast (Saranac)

5 = Intermediate (Ranger)

7 = Slow (Vernal)

TEST LOCATION: West Salem, WI

## 4. AREAS OF ADAPTATION IN U.S. (Where tested and proven adapted):

1

Primary Area of Adaptation

2 6

Other Areas of Adaptation

- 1 = North Central  
 5 = Moderately Winterhardy Intermountain  
 8 = Other (Specify)

2 = East Central

- 3 = Southeast  
 6 = Winterhardy Intermountain

- 4 = Southwest  
 7 = Great Plains



## 5. FLOWERING DATE (When 10% of plants possess open flowers at time of first spring cut):

0 2

Days Earlier Than

3

Same As

4

1 = CUF 101

2 = Mesilla

3 = Saranac

4 = Vernal

5 = Norseman

5 5

Days Later Than

6

TEST LOCATION: West Salem, WI

**6. PLANT COLOR (Determined from healthy regrowth 3 weeks after first spring cut, controlling leafhoppers if necessary):**☐

1 = Very Dark Green (524)

2 = Dark Green (Vernal)

3 = Light Green (Ranger)

COLOR CHART VALUE (Specify chart used: \_\_\_\_\_):

APPLICATION VARIETY: \_\_\_\_\_

VERNAL: \_\_\_\_\_

TEST LOCATION: \_\_\_\_\_

**7. CROWN TYPE (Determined from spaced plantings):**☐

Noncreeping Types:

1 = Broad (Vernal)

2 = Intermediate (Saranac)

3 = Narrow (CUF 101)

Creeping Types:

4 = Creeping Rooted (Rangelander)

5 = Rhizomatous (Rhizoma)

**8. FLOWER COLOR (Determine frequency of plants for each color class as defined by USDA Agricultural Handbook No. 424 (Barnes 1972), allowing all plants in plot to flower):**☐

80

% Purple and Violet (Subclasses 1.1 to 1.4)

☐

10

% Blue (Subclasses 2.3 and 2.4)

☐

10

% Variegated Other Than Blue (Subclasses 2.1, 2.2, 2.5 to 2.9)

☐

0

% Yellow (Subclasses 4.1 to 4.4)

☐

0

% Cream (Class 3)

☐

0

% White (Class 5)

TEST LOCATION: Nampa, Idaho**9. POD SHAPE (Determine frequency of plants with the following pod shapes produced on well cross-pollinated racemes):**☐

98

% Tightly Coiled (One or more coils, center more or less closed)

☐

2

% Loosely Coiled (One or more coils, center conspicuously open)

☐

0

% Sickie (Less than 1 coil)

TEST LOCATION: Nampa, Idaho

**10. PEST RESISTANCE:** Provide in the appropriate column, trial data for application variety, and resistant (R) and susceptible (S) check varieties, synthetic generation tested, average severity index scores (ASI), least significant difference statistics (LSD .05), the institution in charge of test, year, and location of test, and whether test is a field or laboratory evaluation. Describe scoring system, and any test procedure which differs from standard methods proposed by Elgin (1982). Trial data from other test years or locations should be presented whenever available on a separate document as Exhibit D.

Seeds of the check varieties and germplasm lines listed below can be obtained from the USDA Field Crops Laboratory, Bldg. 001, Rm. 335, BARC-West, Beltsville, MD 20705. Although comparisons with check varieties listed below are preferred, comparisons with any appropriate check variety recommended by Elgin (1982) may be presented.

A. DISEASE RESISTANCE: DISEASE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	*** LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Anthracnose, Race 1 ( <i>Colletotrichum trifolii</i> )	Application	1	55	100		12.2	Forage Genetics, 199 West Salem, WI Lab
	Arc (R)		64	100			
	Saranac (S)		0	100			
	SCORING SYSTEM: Standard test - seedlings						
Anthracnose, Race 2 ( <i>Collectotrichum trifolii</i> )	Application						
	Saranac AR (R)						
	Arc (S)						
	SCORING SYSTEM:						
Bacterial Wilt ( <i>Corynebacterium insidiosum</i> )	Application	1	59	120	1.84	0.33	Forage Genetics, 199 West Salem WI Field
	Vernal (R)		42	120	2.58		
	Narragansett (S)		0	120	4.32		
	SCORING SYSTEM: Standard test - field						
Common Leafspot ( <i>Pseudopeziza medicaginis</i> )	Application						
	MSA-CW3AN3 (R)						
	Ranger (S)						
	SCORING SYSTEM:						

## 10. A. PEST RESISTANCE (Continued):

DISEASE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Downy Mildew ( <i>Peronospora trifoliorum</i> )	Application						
Isolate, if known:	Saranac (R)						
	Kanza (S)						
	SCORING SYSTEM:						
Fusarium Wilt ( <i>Fusarium oxysporum</i> f. <i>medicaginis</i> )	Application	1	59	120	2.06	0.32	Forage Genetics 199 West Salem, WI Fiel
	Moapa 69 (R)		54	120	2.17		
	Narragansett (R)		7	120	3.98		
	SCORING SYSTEM: Standard Field test						
Phytophthora Root Rot ( <i>Phytophthora megasperma</i> f. <i>medicaginis</i> )	Application	1	67	100		10.6	Forage Genetics 1992 West Salem, WI Lab
	Agate (R)		43	100			
	Saranac (S)		0	100			
	SCORING SYSTEM: % Survival, seedling test						
Verticillium Wilt ( <i>Verticillium alboatrum</i> )	Application	1	42	100	2.29	0.43	Forage Genetics, 199 West Salem, WI Lab
	Vertus (R)		40	100	2.33		
	Saranac (S)		0	100	3.89		
	SCORING SYSTEM: Standard test - greenhouse						
Other (Specify)	Application	1	54	100		10.3	Forage Genetics, 199 West Salem, WI Lab
Aphanomyces root rot (race 1) ( <i>A. eutriches</i> )	(R) WAPH1		50	100			
	(S) Agate		2	100			
	SCORING SYSTEM:						
Other (Specify)	Application						
	(R)						
	(S)						
	SCORING SYSTEM:						

## B. INSECT RESISTANCE:

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT DEFOLIATION	DEFOLIATION IN PERCENT OF RESISTANT CHECK	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Alfalfa Weevil ( <i>Hypera postica</i> )	Application						
	Arc (R)			100			
	Saranac (S)						
	SCORING SYSTEM:						



## 10. B. INSECT RESISTANCE (Continued):

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT SEEDLING SURVIVAL	NUMBER OF SEEDLINGS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Blue Alfalfa Aphid ( <i>Acyrtosiphon kondoi</i> )	Application						
	CUF 101 (R)						
	PA-1 (S)						
	SCORING SYSTEM:						
Pea Aphid ( <i>Acyrtosiphon pisum</i> )	Application	1	51	100		9.6	Forage Genetics, 1993 Nampa, Id Lab
	Kankak (R) Baker		45	100			
	Ranger (S) Vernal		6	100			
	SCORING SYSTEM: Standard test						
Spotted Alfalfa Aphid ( <i>Therioaphis maculata</i> )  Biotype, if known:	Application	1	65	100		16.2	Forage Genetics, 1992 Nampa, ID Lab
	Kankak (R) Baker		50	100			
	Ranger (S) Ranger		4	100			
	SCORING SYSTEM: Standard Test						

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Potato Leafhopper, Yellowing ( <i>Empoasca fabae</i> )	Application						
	MSA-CW3An3 (R)						
	Ranger (S)						
	SCORING SYSTEM:						
Other (Specify)	Application						
	(R)						
	(S)						
	SCORING SYSTEM:						

## C. NEMATODE RESISTANCE:

NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Northern Root Knot ( <i>Meloidogyne hapla</i> )	Application						
	Nev. Syn. XX (R)						
	Lahontan (S)						
	SCORING SYSTEM:						

## 10. C. NEMATODE RESISTANCE (Continued):

10. C. NEMATODE RESISTANCE (continued)							
NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Southern Root Knot ( <i>Meloidogyne incognita</i> )	Application						
	Moapa 69 (R)						
	Lahontan (S)						
	SCORING SYSTEM:						
Stem Nematode ( <i>Ditylenchus dipsaci</i> )	Application	1	18	120	3.15	0.21	Forage genetics, 1993 Nampa, ID Lab
	Lahontan (R) * ***** Vernema		52	120	2.57		
	Ranger (S)		8	120	3.89		
	SCORING SYSTEM:						
Other (Specify)	Application						
	(R)						
	(S)						
SCORING SYSTEM:							

## 11. INDICATE THE VARIETY THAT MOST CLOSELY RESEMBLES THE APPLICATION VARIETY FOR EACH OF THE FOLLOWING CHARACTERS:

CHARACTER	VARIETY	CHARACTER	VARIETY
Winterhardiness	DK-133	Plant Color	Apollo Supreme
Recovery After 1st Cut	DK-133	Crown Type	Legen Dairy
Area of Adaptation	MultiKing 1	Combined Disease Resistance	DK-133
Flowering Date	Fortress	Combined Insect Resistance	DK-133

## REFERENCES

Barnes, D.K. 1972. A System for Visually Classifying Alfalfa Flower Color. U.S. Dep. Agric. Handb. 424. 18 pp. (Note: Greenish cast of plate 6, A and B is an artifact of printing, actual colors a blend of yellow and white.)

Elgin, J.H., Jr., (ed.). 1982. Standard Tests to Characterize Pest Resistance in Alfalfa Cultivars. U.S. Dep. Agric. Tech. Bull. (In Press).

Gunn, C.R., W.H. Skrdla, and H.C. Spencer. 1978. Classification of *Medicago sativa* L. using legume characters and flower colors. U.S. Dep. Agric. Tech. Bull. 1574. 84 pp.

Munsell Color Co. 1977. Munsell Plant Tissue Color Charts. Munsell Color Co., Inc. Baltimore.

NOTE: Any additional descriptive information and supporting documentation may be provided as Exhibit D.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E  
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Northrup King Co.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME Rushmore
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) P.O. Box 959 Minneapolis, MN 55440	5. TELEPHONE (include area code) (612) 593-7261 7. PVPO NUMBER 9500077	6. FAX (include area code) (612) 593-7389
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
10. Is the applicant the original breeder? If no, please answer the following: a. If original rights to variety were owned by individual(s): Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO b. If original rights to variety were owned by a company: Is the original breeder(s) U.S. based company? If no, give name of country <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
11. Additional explanation on ownership (If needed, use reverse for extra space):		

## PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-2791.

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E  
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)  Novartis Seeds, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  FG 4J16	3. VARIETY NAME  Rushmore
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)  7500 Olson Memorial Hwy Golden Valley, MN 55427	5. TELEPHONE (include area code) (612) 593-7333	6. FAX (include area code) (612) 593-7801
7. PVPO NUMBER 9500077		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

If no, give name of country \_\_\_\_\_

☒ YES ☐ NO

10. Is the applicant the original breeder? If no, please answer the following:

☐ YES ☒ NO

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country \_\_\_\_\_

☒ YES ☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country \_\_\_\_\_

11. Additional explanation on ownership (If needed, use reverse for extra space):

Attached letters from Dr. Mark McCaslin dated September 24, 1996 and January 8, 1997 document ownership.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

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Addendum to Exhibit E  
AAA (per letter) of Dec 1996

The alfalfa (*Medicago sativa* L.) variety "Rushmore" was developed by Dr. Mark McCaslin, and employee of Forage Genetics. As a condition of employment, said employee has agreed that all rights to the variety "Rushmore" are transferred to Forage Genetics, with no rights to the variety retained by the employee. Forage Genetics has licensed certain rights to Northrup King. These include: worldwide marketing rights, the right to commercial seed production, the right to name the variety and to independently develop programs for the marketing and sale of the variety, the right to file for Plant Variety Protection of the variety and the right to represent the variety in international variety registration. These rights for the alfalfa variety "Rushmore" have been assigned to Northrup King on an exclusive basis.

Sincerely,



Mark McCaslin  
President

cc: Jan Johnson, Northrup King